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THE WHEAT AND FLOUR TRADE UNDER FOOD ADMINISTRATION CONTROL: 1917–18

SUMMARY

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The act authorizing the President to establish agencies for the control of foods and fuels was approved August 10, 1917. Under its provisions the Food Administration was at once given legal standing and began to function as the directing and controlling authority in the food trades of the United States. Sufficient time has now elapsed to permit a review and critical estimate of the activities of the Food Administration, in certain

directions at least. Easily the most important of its problems, and in some respects the most difficult, have been encountered in the regulation of the wheat and flour trade. In this paper an attempt is made to analyze these problems and to discuss the efficacy of the measures adopted to meet them.

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THE COMMERCIAL SITUATION AND PRICE TREND DURING THE CROP YEAR, 1916-17

In 1913, in 1914, and again in 1915, the United States produced the largest wheat crops ever harvested in this country; the average for the three years was almost 900,000,000 bushels. The average exports of wheat (and flour) for the same years were almost a quarter of a million bushels; the exports for the years 1914–15 and 1915–16 were much the largest recorded during the present century. In striking contrast to these huge crops was the exceedingly disappointing harvest of 1916, which amounted to only 636,318,000 bushels. However, there was a large "carry-over" from the 1915 crop, amounting at the beginning of July, 1916, to 179,-174,000 bushels, which, together with the new crop, made possible an export movement of 209,438,795 bushels during the succeeding twelve months.

It is the occurrences of these twelve months to which this paper must first give attention. The facts just recited make it evident that during the first two years of the European war this country had played a large part in the provisioning of western Europe. The neutral nations as well as the entente allies had drawn very heavily upon the United States for wheat and flour, but it had also been possible for them to draw upon the crops of Australia, Argentine, India, etc. To a lesser extent this was possible also in 1916–17, but the growing scarcity of ocean tonnage caused greater and greater dependence upon nearer sources of supply, as Algeria and North America. The result was an extremely close adjustment of supplies and needs during the year 1916–17; on July 1, 1917, the United States came into the new crop year with a carry-over of only 51,078,000 bushels; — the lowest figure recorded since 1909.

Not only was there a remarkably close adjustment of supplies to needs during the twelve months ending in June, 1917, but there was also, over the greater part of that period, an almost continuously mounting price level for wheat and flour. Only between November, 1916, and early February, 1917, did a net decline occur; after the first week in February there was a sharp upward swing which reached a climax about the middle of May, at a point nearly three times as high as the prices current a twelvementh before. This peak was not maintained, but the average prices of June and July were well over twice the level of the corresponding months in 1916.

This extraordinary price increase was due to three fairly distinct factors: (1) poor crop prospects and rapidly diminishing wheat and flour stocks in the United States and Canada; (2) uncontrolled, and at times apparently reckless, buying in American markets by the representatives of the allied and neutral countries; (3) the impossibility of drawing upon the reserves of such distant regions as Argentina, Australia, and India, in appreciable quantity, owing to the ever-shrinking supply of merchant shipping resulting from the destruction of tonnage by unrestricted submarine warfare. The urgent needs of western Europe had to be met from

the scanty surplus of North America. As it has been well put: 1 "Wheat and the products of wheat became war munitions, and war munitions are bought with a ruthless disregard of all commercial factors." Under such conditions the ordinary conditions of demand and supply can hardly be said to exist at all. In a sense, the law of demand and supply was simply inoperative. There resulted an abnormal and quite unprecedented condition in the wheat and flour market of the United States during the spring of 1917. The highest price paid for cash wheat since the Civil War was reached in April; by the middle of May it had advanced nearly 50 per cent more. Curiously enough, high prices of wheat and flour had the effect of stimulating rather than checking the buying demand of American distributors and consumers. Flour consumers were frightened at the prospect of impending scarcity, and their fears were not allayed by the very gloomy reports issued by the Department of Agriculture on the condition of the winter wheat crop and the injudicious utterances of its officials and other public men concerning possible famine conditions to come. There resulted a veritable flour panic; with each successive increase in prices there was a fresh wave of hysterical buying; speculation by flour jobbers and dealers, as well as by wheat operators, was rampant. Extraordinary profits were taken, in many cases almost reluctantly taken, both by millers and grain dealers. Predictions were freely made by responsible officials that still higher prices might be expected unless the market was controlled. The buyers for the foreign governments had well-nigh cornered the market through their ownership of the May future; the market was really "oversold" and the selling interests wanted some action taken to protect them from excessive loss. Finally, on

¹ By Mr. Julius H. Barnes, President of the Food Administration Grain Corporation.

May 14, under pressure from government officials and from public sentiment, the directors of the Chicago Board of Trade prohibited further trading in the May future and forced the settlement of outstanding contracts at a price fixed by a committee. With cash wheat selling at \$3.45 the committee set a maximum price of \$3.18 for the May contract. Subsequently speculative trading in the July and September futures was also prohibited and outstanding contracts terminated. The committee fixed the settling prices on these contracts at \$2.75 and \$2.45 respectively. Similar action was taken by the other important exchanges. "The moment this was done," to quote the words of a keen observer, "the whole American marketing system fell like a house of glass."

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EVIDENT NECESSITY FOR GOVERNMENT CONTROL

In these conditions it became abundantly evident that some form of control was necessary if the situation was not to get out of hand altogether. As early as April, 1917, the Council of National Defense had summoned Mr. Herbert C. Hoover, who had discharged with signal success the perplexing and difficult task of rationing the Belgian nation, to come to the United States to undertake a similar task for his own country. Mr. Hoover arrived in Washington early in May, but found the political situation so unsettled as to make it extremely doubtful whether he could render useful public service. It is not the purpose of this paper to trace the tortuous course of the so-called Food Control Act through the debates of Congress; suffice it to say that many interests were arrayed against the appointment of a business man

¹ Mr. Julius H. Barnes.

to a position of real authority in Washington. However, Mr. Hoover had the backing of the President, and he proceeded at once, tho unofficially, to the working out of plans for the effective control of the food industries which might be put into operation as soon as authority was granted to do so. The first important industry to be considered was the wheat and flour trade.

The next few months were a period of anxious waiting on the part of the commercial interests affected. Already in April the Council of Grain Exchanges had sent representatives to Washington to confer with the Secretary of Agriculture and to work out some plan of control acceptable to the government and the trade. Out of these consultations was organized the Committee of Grain Exchanges in Aid of National Defense. This committee together with a somewhat similar committee representing the western exchanges, met in conference with Mr. Hoover on May 16, and at his request submitted a tentative outline of a plan of control. This plan emphasized: the absolute necessity of direct government control of the transportation of foodstuffs (interchange of railroad cars, etc.); the fixing of a wheat price and its maintenance for the entire crop year without change; the control by the government of the distribution of the available wheat supply, and, as a means to this end, such control over terminal and country elevators as to deprive everyone, except the government, of their facilities for the storage of wheat (and rye); the discontinuance of trading in futures in wheat on the grain exchanges; and the limitation of the practices, by consumers, of buying flour far in advance, and by mills, of contracting for the sale of flour further ahead than "prompt shipment." This remarkable document foreshadowed many of the most important policies which were later adopted by the Food Administration. The conclusion was reached at these conferences that, with the elimination of waste and proper conservation in this country, an ample supply of grain would be available, both for domestic consumption and for the requirements of the Allies. The problem was, therefore, one of administration; the creation of a Food Administration was the logical recommendation.

Coincidently the flour milling industry had become alive to the necessity of some stabilizing action by public authority, and at the inspiration of Mr. W. C. Edgar, editor of the Northwestern Miller, sought to get the support of Mr. Hoover in a scheme for the reduction of wheat prices and in a plan of milling regulation which would be acceptable to the trade. In May, Mr. Hoover met some of the leading millers in conferences and received suggestions for a plan of government control. Some of these suggestions were of a drastic and farreaching character, based upon the authority granted to the President under the National Defense Act. They extended to the requisitioning of grain at country points of shipment, the pooling of all terminal elevator facilities at the primary markets, the fixing of prices on all grains and on flour, the placing of an embargo upon exports of grain and grain products, and the direction of all export movement by the food controller. These suggestions were deemed impracticable or their execution considered unwise; it was evidently the preference of the President to wait for specific authorization by Congress rather than to exercise the war powers conferred in general terms under the Defense Act.

Another set of suggestions was contained in a letter of May 27, to Mr. Hoover, signed by ten prominent representatives of the milling trade who had been in Washington in discussion of the Lever food control bill before Congress. These representatives urged the absolute

necessity of a national food administration, and desired immediate action because of the pressure of forward contracts covering the purchase of new wheat and the forward sale of flour. They recommended that the food controller be given authority over the transportation of foodstuffs both by lake and rail; that all foreign buying of foodstuffs be under the jurisdiction of the food controller, with a view to effecting a fixed price of grain, and perhaps of grain products; that a maximum price be fixed on flour; that relative prices be fixed on coarse grains (corn, oats, barley, etc.) with reference to the prevailing price of wheat, so as to encourage their use and insure the conservation of wheat flour; that the practice of buying flour for long deferred shipment be discontinued: and that a "milling executive" composed of members of the milling industry be designated to act as intermediaries between the proposed Food Administration and the milling trade with a view to enlisting the helpful cooperation of millers generally.

A suggestion somewhat similar to this last idea was contained in a brief submitted to Mr. Hoover on June 10 by Mr. W. C. Edgar. This interesting paper called attention to the state of demoralization existing in the milling industry, growing out of the inability of the millers, unaided, to remedy the existing trade deadlock, in view of the price-fixing debate in Congress and the prevailing uncertainty as to what would be done and when. Conditions had really become critical; many millers were afraid to buy wheat, since the hedging market was closed and there might be sudden and arbitrary change in the wheat price through Congressional action. They were also unwilling to accept orders for flour, except those specifying immediate shipment, in view of the probability of repudiations if prices should be reduced. Many mills were, therefore, greatly curtailing their output, just at the moment when commercial stocks had already been reduced to a dangerously low point.

The winter wheat crop was already beginning to move in the Southwest and the millers needed some assurance as to what would be done before they could with safety handle this wheat. Therefore, Mr. Edgar suggested that, without waiting for action by Congress, the Food Administrator, acting under the President's authorization, proceed to organize the milling industry on a cooperative basis for the purpose of working out definite plans for the regulation of the trade. A scheme of organization was proposed calling for the appointment of a Milling Executive or General Chairman, eight heads of divisions, one for each of the eight milling geographical sections of the country, and twenty-nine heads of sub-divisions. These were all to be active millers and were to receive their appointments from the Food Administrator; the whole organization to be an advisory body, appointed tentatively to work out the machinery for the control and administration of the milling industry, which could be put into operation immediately upon legal authorization by Congressional action.

This course of action was decided upon by Mr. Hoover, who on June 22, appointed a committee of nine leading members of the industry, representing the several sections of the country. This body, known as the United States Millers' Committee, conceived its duties as the perfecting of a self-controlled organization of the milling industry, acting in conjunction with the proposed Food Administration. On June 28 it reported a plan which embodied some of the principles ultimately adopted as the basis of the milling regulations. The most important single feature which had been elaborated at this time was the scheme for control-

ling flour prices. It was proposed that under the intratrade agreement each mill should be entitled to sell its products on a cost plus profit basis, provided the cost of manufacturing and marketing did not exceed seventy-five cents per barrel, while the amount of profit was to be limited to twenty-five cents per barrel; the quantity of wheat that might be used in making a barrel (196 pounds) of flour was limited to 4.75 bushels (285 pounds) — a rate of flour extraction equivalent to 69 per cent. These were liberal figures, but they were deemed necessary for the accommodation of the less well equipped mills whose coöperation in the regulatory plan it was considered essential to obtain.

This whole plan for self-regulation of the industry, under the supervision of practical millers, was predicated upon the ability of the Millers' Committee to secure an agreement on the part of the mills respecting the allocation of business among them on the basis of their average output for the three preceding years. This was to be brought about by the proportionate allotment of wheat to the mills under government direction; export orders and government contracts were to be awarded on a pro rata basis to the mills through a central selling agency. By voluntary agreement the mills were also to limit their sales of flour to a period thirty days in advance: a uniform sales contract was to be used. To pay the expenses of administration a monthly assessment of one cent per barrel of output was to be levied on all mills entering the organization.

To this plan of milling regulation Mr. Hoover gave his approval in general terms, and he proceeded to the formation of the regional sub-committees but refrained from committing himself to specific plans until legal authority was granted. Early in July the Millers' Committee sent an announcement to the trade (through the offices of the Millers' National Federation) setting forth what had already been accomplished in voluntary organization; millers were requested to signify their willingness to coöperate in the further work of the Committee. Within a few weeks favorable replies were received from mills representing a majority of the producing capacity of the country.

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SLOW PROGRESS OF LEGISLATION

Meanwhile legislative action still dragged, and altho prices had receded from the high levels of May and early June, which materially reduced the difficulties of the mills in effecting the adjustment from the old crop to the new, the mills quite generally still refrained from buying wheat or selling flour ahead because of the risks of a declining market. In the absence of a hedging market it was impossible to bridge the gap between the current high prices of wheat and flour and the prospective lower prices when the new crop should be harvested.

On June 18, President Wilson made public a letter addressed by him to a member of Congress in which he urged the quick passage of food legislation in order that prices of foodstuffs might be reduced by putting a stop to speculation. The President declared that legislation was urgently needed before July 1, if the country was to be made safe from these dangers of speculation and oppressively high prices.

July 1 came and went, but with it came no food legislation. On July 11, the President gave to the press a letter from Mr. Hoover which called attention to the perils of delay. This statement rehearsed the fact that the farmers had received an average price of \$1.51 per bushel for the 1916 wheat harvest, while the price at

Chicago had gone as high as \$3.25. Flour prices are based upon current, i. e., "speculative" wheat prices; thus the consumer had been made to pay as much as 100 per cent more than the producer had received. This great increase in the margin between producer and consumer was due not so much to vicious speculation as to the fact that every link in the distribution chain had found it necessary to exact wider profit margins in order to be insured against the risks of widely fluctuating prices during a period when practically all normal price stabilizing agencies had been disrupted by the effects of war. A consequence was that large masses of people were actually being undernourished in the great consuming centers, due to the exorbitant cost of living.

Mr. Hoover's statement also called attention to the consolidation of Allied buying into the hands of a single agency, the Wheat Export Company. Thus the export price became subject to the will of this one purchaser. Not only this, but the growing shortage of ocean tonnage would necessitate spreading the export movement of the new crop over a considerable period, whereas it had normally been concentrated into the fall months. The result would probably be a serious glut in the interior terminal markets, which would place an added strain on the financial resources of the legitimate grain trade and probably necessitate the assistance of a considerable speculative element. The necessity of reliance upon the speculative element to carry the surplus stocks which would result from physical restrictions upon freedom of export movement indicated that the speculators' toll would inevitably be levied again upon both producer and consumer. To protect the farmer from a disastrous slump in the price of his wheat resulting from a glutted market, some strong and efficient government action was absolutely necessary, not only to secure a just return to the wheat grower, but in order to stimulate production for the next year. The necessary and desirable kind of action was that the government should buy the surplus wheat at some reasonable minimum price, and by so doing stabilize the market for the benefit of both producer and consumer. The speculator could thus be dispensed with altogether.

To meet the peculiar conditions prevailing in the midsummer of 1917 it had been suggested that the Wheat Export Company enter into an agreement to protect the mills from loss on their unsold wheat and flour which might be occasioned by sudden and arbitrary reduction of prices through government action. Under normal conditions of business it is a regular feature of the operations of most flour mills to seek orders for flour far enough in advance of delivery to insure continuous and uninterrupted grinding; this implies contracting ahead for supplies of raw material. But with the conditions existing in May and June of 1917 it was unsafe for a mill to make new forward sales, since new purchases of wheat for future delivery were forbidden by the emergency rules of the exchanges; and to accumulate "unsold" stocks of wheat was a pure gamble. As the largest single buyer in the market, it was apparent that the Wheat Export Company would be the chief beneficiary by the expected reduction in wheat and flour prices. Some tentative arrangements were, in fact, entered into: the Export Company undertook to "take up the slack" between the millers' unsold and unhedged wheat and flour at the basis of \$2.00 per bushel, Chicago, and any price below that figure which might be established by government action. At no time during June or July did the price approach \$2.00, however, and on July 12, owing to the delay of Congress to enact legislation, the Wheat Export Company withdrew its assurance.

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For the next month wheat prices approximated the \$3.00 mark at the principal interior terminal markets. It was not until August 8, however, that the Food Act was finally passed in a form acceptable to the President. The preamble to the Act recited that the existence of a state of war made it essential to assure an adequate supply and equitable distribution, and to facilitate the movement of foods, feeds, fuel, implements, etc. (defined as "necessaries"; to prevent scarcity, monopolization, hoarding, injurious speculation; and to establish and maintain governmental control of such necessaries during the war. When it came to a definite grant of powers, however, the Act was as significant for what it omitted as for what it contained. There was no specific reference in it to a Food Administration; the powers of control over the food purveying industries rested (almost wholly) upon the licensing provisions, under which storage charges, commissions, practices, and profits were required to be just, reasonable, non-discriminatory, and fair, under penalty of revocation of The only price-fixing authorized, aside from that of coal and coke, was the minimum guaranteed price to the producer of \$2.00 per bushel for wheat of the 1918 harvest; this minimum guarantee was designed to stimulate the planting of a large crop in 1917-18. The President was authorized to buy, store, and sell wheat, flour, meal, beans, and potatoes; for this purpose the sum of \$150,000,000 was appropriated. The Act contained stringent provisions against the destruction, waste, or hoarding of necessaries, and against conspiracies to restrict their supply or enhance their price. Farmers, however, were specifically exempted from the

provision against hoarding. The President was authorized to requisition foods, feeds, and fuels for public use, and storage facilities for the same, as well as factories, pipe lines, mines and other plants used in their production. He was also given practically absolute power over the operations of produce exchanges and boards of trade and the transactions carried on therein. A provision of signal importance for the regulation of the grain and flour trade was the authorization of voluntary agreements for carrying out the purposes contemplated by the Act.

The Food Act was approved on August 10, and on the same day the President appointed Mr. Hoover as Food Administrator. Mr. Hoover announced the aims of the Food Administration as threefold: (1) to regulate the trade so as to eliminate vicious speculation and to stabilize prices; (2) to guard exports so as to retain sufficient supplies of foodstuffs within the country for domestic use; (3) to stimulate food saving and conservation so as to set free for export to the Allies as large a quantity of food as might be necessary. Three months previously Mr. Hoover had announced that the task of food administration could be successfully accomplished through the voluntary coöperation and direction of legitimate distributors of foodstuffs and with the help of the women of the country. Already the latter part of this program had been put into operation under the direction of the President, without waiting for legal sanction by Congress. A well organized and widespread conservation campaign was launched in June. There remained the complex task of perfecting the policies of trade control and regulation.

The machinery which had been elaborated for the control of the wheat and flour trade was the first to be set in motion. On August 12, the plans of the Food

Administration for the control of wheat, flour, and bread were announced. Attention was called to the disruption of the world's normal wheat markets (owing to short crops in many producing countries, lack of ocean tonnage, and unavailability of accumulated stocks in certain countries cut off by belligerent lines), and the consequent demoralization of the regular commercial price-making agencies for wheat; to the fact that the Allied governments had centralized their wheat purchasing in the United States and had thus acquired a dominating position in the buying market; to the possibility of an early termination of the war and the consequent release of large stocks of wheat from sources currently unavailable as a further unsettling factor. All these considerations pointed to the necessity of some efficient government action to stabilize wheat prices for the protection of both producer and consumer. To meet this situation the Food Administration announced its intention to open agencies at the principal terminal markets for the purchase of all wheat that would be offered, at a fair price which would be maintained through the entire harvest year 1917-18. If necessary, the Food Administration would take the whole harvest in order to maintain a fair price. It was planned to resell wheat to the flour millers, and for export in limited quantities. The grain exchanges were asked to suspend all dealings and quotations in wheat futures, beginning with September 1; further to reduce speculation in wheat and flour, all elevators and all mills of over 100 barrels daily capacity would be required to take out a government license. the chief conditions of which were that only reasonable and customary charges should be made for warehouse service, and that no wheat should be stored for more than thirty days without the approval of the Food Administration.

On August 14 was announced the incorporation of the United States Food Administration Grain Corporation, organized under the laws of the state of Delaware, for the purpose of controlling the wheat supply; the entire capital stock of \$50,000,000 was to be held by the United States government. The Grain Corporation was designed as the agency through which the Food Administration would make its purchases of wheat at the terminal markets, and also arrange for the control of exports of wheat to the Allies and to neutral nations. The Food Administration announced that in its control over exports it would stipulate for a large proportion of export of flour instead of wheat, and in this way encourage a large home production of flour and thus reduce manufacturing costs, and secure to the American public the benefit of lower conversion and distributing costs, as well as provide a large supply of mill feed for the livestock and dairy industries.

In the meantime the provisional organization of the United States Millers' Committee had been confirmed by the President. The committee assembled at Chicago, August 14–15, where the plans for the regulation of the milling industry were worked out in detail. The whole country was divided into eight (later nine) districts, each with a milling executive at its head; a committee of representative millers was appointed in each district and administrative offices set up at the divisional headquarters; a central office was established at New York; each member of the central committee was made divisional chairman over his own district; and the entire structure was designated the United States Food Administration Milling Division.

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Through the Milling Division a voluntary agreement was entered into with the Food Administration by several hundred millers providing for the regulation of the industry; voluntary agreements were also made between the millers and the Grain Corporation. chief provisions of these agreements were that the mills should not pay a higher price for wheat than the fair price adopted by the Food Administration for government purchases: that the Grain Corporation should guarantee the mills against a loss by decline in the value of their unsold wheat and flour below the government price basis, bought during the period of the agreement; that the Grain Corporation should endeavor to maintain in available positions an adequate supply of suitable wheat to meet the milling demands of the mills, and secure an equitable distribution of wheat between the mills on a pro rata basis: — each mill's quota was to be proportionate to the ratio that its average grind during the three years 1914, 1915, 1916 bore to the total average grind of all the mills during that period, due allowance being made for new capacity; that the millers should operate their mills at a profit not to exceed twenty-five cents per barrel on flour, and fifty cents per ton on feed — about two cents per barrel of flour additional; that they should make a return upon oath of their profits earned during each month; that they should not contract to sell flour more than thirty days in advance (thus reducing speculative buying); that they should not store wheat without the permission of the Food Administration for more than thirty days' supply; and that the Grain Corporation should apportion over the entire milling trade all export sales of flour.

The Food Administration took the view that it did

not possess legal authority to prescribe prices: hence the method of voluntary agreement. The difficulties of the situation were very great. At the date of the passage of the Food Act, August 10, the price of cash grain at Minneapolis was around \$3.00 per bushel while the September future was quoted nearly \$1.00 per bushel lower. The Millers' Committee had hoped to get the sanction of the Food Administration to an intra-trade agreement to force down prices, but at the last moment (August 24) the Attorney General's office ruled that such an agreement was in conflict with the anti-trust laws, and it was necessary to abandon it and substitute in its place an individual agreement between the Food Administration and each miller. This altered the whole legal aspect of the plan of regulation adopted. Under the earlier arrangement the Millers' Committee had represented trade autonomy and proposed to operate in conjunction with rather than under control of the Food Administration: as finally worked out the Milling Division became a subordinate branch of the Food Administration, and its members became officers of the government. None the less, the original proposals of the committee became the basis of the regulations adopted for the control of the milling industry, and a considerable measure of discretion as to their enforcement was of necessity lodged in the Milling Division.

The flour milling industry is composed of nearly 7,000 distinct units representing a wide variety of methods in manufacturing and selling, in grinding different kinds of wheat, and in producing at greatly varying costs. Owing to the partial abandonment of the earlier plan of price regulation, it became necessary to mobilize this great industry within a period of ten days, and to induce substantially all the considerable mills to enter the agreement with the Food Administration, so as to give promise of making it effective.

What were the inducements to mills to enter such an agreement? At first sight it might seem that in so doing a mill was surrendering a great deal. The acceptance of the three-year basis of wheat allotment and consequent restriction of business operations, seemed to be a sacrifice of individual commercial initiative. However, the circumstance that the Grain Corporation would have practical control of wheat supplies made it imperative that all except remote country mills do their purchasing through the Grain Corporation, if they were to get any wheat at all. On the other hand, there was the positive assurance that under the Grain Corporation's wheat allotment plan the relative position of all the units in the industry, at least in so far as they entered the agreement, would be maintained. Each mill would be entitled to a definite pro rata share in the total flour business. There was also the assurance of an opportunity to share in the export business (and to bid upon government contracts upon a preferred basis).

Considerations of a more dubious kind doubtless had their influence also in bringing wavering millers into the agreement. With the sweeping powers of profit control which could be exercised under the licensing section of the Food Act, it must have been realized that a free rein would not be given to those concerns which elected to remain outside (the agreements). Contrasted with this was the quasi-promise held out by overzealous members of the Milling Division that the twenty-five cents per barrel profit maximum was equivalent to a guaranty of twenty-five cents per barrel net. This was a rate of profit which was tempting indeed, compared with the rates which were normal for the industry.

¹ The Federal Trade Commission's Report on Flour Milling and Jobbing, issued April 4, 1918, showed that for the year 1912-13, the net profit per barrel had been 14 cents, and this yielded a return of over 9 per cent upon the investment; for the year 1913-14, the profit per barrel was 19 cents, yielding a return of about 13 per cent on the

There was the further consideration that the Milling Division would be administered by successful millers, in sympathy with the trade, and themselves having a large stake in the ultimate success of the plan of intratrade control. Sundry advantages were to be expected also from the various forms of assistance which the Grain Corporation and the Milling Division might render individual millers, through car service bureaus, help in arranging export shipments and sales to the government, and from the intangible, tho important "advertising value" resulting from the exploitation of the fact that the agreement mill was a "member of the Food Administration." A quite different stimulus operating in the same direction was the pressure put upon the trade by the editorial policy of the leading trade journal.

Not least among the considerations leading millers, and grain dealers also, to enter the agreement with the Grain Corporation, was the guaranty by the latter against a decline in the value of wheat or flour below the government price basis. Had the Grain Corporation been obliged to rely upon its own capital of \$50,000,000 it could not safely have assumed this great hazard. Arrangements were entered into with the Wheat Export Company, however, backed by the financial resources of the British Treasury, by which the Export Company practically underwrote the purchases of the Grain Corporation. As it was, the latter assumed the function of protecting unsold stocks of wheat or flour against price risks, and thus stepped into the gap which the restriction of future trading had left in normal hedging operations.

As the result of all these factors over three thousand millers, first and last, pledged themselves to operate their businesses in agreement with the Food Adminis-

investment; for the year 1914-15, the rate of profit had been 25 cents per barrel, yielding a return of nearly 16 per cent on the investment; for the year 1915-16, the profit per barrel was 21 cents, yielding a return of about 15 per cent on the investment.

tration. The significance of this lies chiefly in the fact that without such voluntary agreements by the mills to observe the government fair wheat price that whole plan of regulation, both as to wheat prices and flour prices, would have fallen through, for there was nothing in the law to prevent a mill from paying any price for wheat that it chose. In fact many country mills did elect to remain outside, and some of them greatly increased their volume of business by offering the farmers a better price than the agreement mills could offer. Owing to the representations of the Milling Division, however, far the greater part of the flour milling capacity of the country was induced to enter the agreement to abide by the government's fixed wheat price. This immensely simplified the whole problem of regulation. The Milling Division deserves great credit for having accomplished this highly difficult task.

Partly to meet the problems presented by the nonagreement mills and partly to extend the principle of uniformity as widely as possible, the Food Administration decided to license every flour mill having a capacity in excess of 100 barrels daily.1 Over six thousand mills were licensed, first and last, and practically all the provisions of the voluntary agreement except those relating to the fair wheat price were made applicable to the business of the licensees. Among the more important of the license provisions were those which prohibited the storage of wheat and rve for more than thirty days, limited the rate of profit to twenty-five cents per barrel, and prescribed the minimum rate of flour extraction. other words, practically the only rule governing flour milling operations which was left as a matter of voluntary agreement was that relating to the maintenance by the agreement mills of the government's fair wheat

¹ Subsequently (January 10, 1918) the size limit was reduced to 75 barrels.

price. With this one large exception, therefore, the effective control of profits and commercial practices by the Food Administration rested upon the powers of license control and not upon the agreement. Owing to the partial abandonment of the earlier plan of price regulation, it became necessary to mobilize this great industry within a period of ten days, and to induce substantially all the considerable mills to enter the agreement with the Food Administration, so as to give promise of making it effective.

VI

With a view to determining a fair price at which the government's wheat purchases should be made, the President announced on August 14, the appointment of a committee of twelve members selected from representatives of the various producing sections and consuming interests of the country. The Food Administration announced in advance its intention "to use every authority given it under the bill and the control of exports to effect the universality of this fair basis throughout the whole of the 1917 harvest year without change or fluctuation," and further declared "if it is necessary for the government to buy the entire wheat harvest in order to maintain this fair price in protection of the producer, we intend to do so." By stabilizing the price of wheat throughout the year the Food Administration hoped to eliminate the hazards of operation of the milling and distributing industries, due to price fluctuations, and to restore the normal margins of profit, so that the price of flour and the price of bread would also be stabilized and presumably be reduced.

On August 30, the Wheat Price Committee made its report to the President recommending the fair price to

be paid by the government for wheat of the 1917 harvest. In reaching its decision the Price Committee had to reconcile the conflicting claims of producer and consumer, bearing in mind the necessity of encouraging the one and yet not discouraging the other. The Committee called attention to the consideration that the government price for the 1917 wheat crop was, in effect, a continuing guaranty until the minimum price guaranteed by Congress for the crop of 1918 should go into effect. The price recommended was \$2.20 per bushel, based on No. 1 Northern spring wheat, or its equivalent, with appropriate discounts for lower grades, delivered at Chicago. The Grain Corporation had already established a schedule of differentials to govern the different grades, and relative prices at the different terminal markets. In announcing to the press the report of the Wheat Price Committee the President authorized a statement reading in part as follows:

It is the hope and expectation of the Food Administration, and my own also, that this step will at once stabilize and keep within moderate bounds the price of wheat for all transactions throughout the present crop year, and in consequence the prices of flour and bread also. The Food Act has given large powers for the control of storage and exchange operations, and these powers will be fully exercised. An inevitable consequence will be that financial dealings cannot follow their usual course. Whatever the advantages and disadvantages of the ordinary machinery of trade, it cannot function well under such disturbed and abnormal conditions as now exist. In its place the Food Administration now fixes for its purchases a fair price, as recommended unanimously by a committee representative of all interests and all sections, and believes that thereby it will eliminate speculation, make possible the conduct of every operation in the full light of day, maintain the publicly stated price for all, and, through economies made possible by stabilization and control, better the position of consumers also.

VII

When the Grain Corporation began active operations early in September it found itself confronted by a set of peculiarly difficult problems. Not least among these was the hostile attitude of many wheat growers which arose from widespread resentment against the policy of fixed price control. This resentment was reflected in unwillingness to sell at the established price basis. Kansas and Dakota farmers, as well as those of the Pacific Northwest, began an agitation for an increased price. The wheat market was in a state of chaos, with the ordinary machinery of the grain trade almost entirely dislocated, and the normal milling production of the country so greatly reduced that there was a dangerously low level of flour reserves as well as a shortage of wheat at the terminals. In spite of the extremely small carry-over from the short crop of 1916—less than one month's needs for domestic consumption — over ten million bushels of wheat and nearly two million barrels of flour were exported in July and August.

VIII

Obviously the first need was to stimulate the idle milling capacity of the country to renewed activity and to restore the flour reserves to the safety mark as quickly as possible. With this end in view the area of the United States was divided into fourteen zones centering about the leading terminal grain markets, and in these fourteen cities and in four "sub-terminal" markets buying agencies were established, each under the direction of a leading member of the grain trade, who gave his services without remuneration and who was required to dissociate himself absolutely from his business interests in

the grain trade. These government buyers were entrusted with the responsibility of administering the Grain Corporation in their respective zones. measure of local autonomy was granted to each zone agent as to the methods he should adopt in meeting the particular problems sure to arise in his own district, but in general the scheme followed was that the Grain Corporation replaced the elevator and warehouse men and grain dealers at the terminals as intermediaries between the country shippers of wheat, whether elevators or farmers on the one hand, and the flour miller and exporters on the other. The prohibition against storage of wheat and rye for more than thirty days, which was made applicable to grain dealers as well as to mills, practically put out of business this whole group of middlemen at the terminal markets, so far as trading in these grains was concerned. Further, the practice of mixing wheat of different grades was absolutely prohibited during the season of 1917–18. The large terminal elevators, which normally carry enormous quantities of wheat through the winter weather, and many of which earn large revenues from mixing wheat of varying grades, enjoyed very little business in wheat under this arrangement. In those markets where grain is ordinarily consigned by county shippers to commission merchants and by them sold to millers or other buyers, the modification of the method of doing business previously in vogue consisted chiefly in requiring all dealers who had wheat for sale at the terminal markets to report their receipts each day to the Grain Corporation zone agent, who then apportioned the available supplies to the mills at the government fair price plus an administration fee of one per cent to cover costs of operation. The Grain Corporation itself bought as little wheat as was necessary to promote the rapid distribution of grain

to the mills and to export agencies, and then only as unloaded in elevators at terminal points. It did not buy at all from farmers or original shippers and discouraged direct consignments on which it collected a one per cent commission charge on account of the administrative labor involved.¹

Of necessity, government control of the wheat business operated greatly to restrict the field of individual enterprise. In view of this fact and of the consequent hardship imposed upon many elements of the trade, the practically unanimous endorsement of the policies and plans of the Grain Corporation by a representative body of terminal elevator and grain dealers assembled at Washington, August 15, 1917, and also by a body of seven hundred terminal and country dealers in convention at Buffalo, September 24, 1917, must be taken as a striking testimonial to the fairness of the Grain Corporation's methods of operation and as convincing evidence of appreciation by the trade of the necessity of government control.

The mode of allotment of wheat to mills within a given zone, and to "outside" mills drawing upon a particular market, was based upon a proportional arrangement determined by averaging the grind of each mill making requisition for wheat in the zone for the three years 1914, 1915, 1916, and alloting to each a percentage of the available wheat equal to the percentage which its average grind for the three years specified was of the total grind for all the mills during the same period,

¹ In the purchase of wheat the Food Administration acts purely in a merchant capacity, buying wheat at the interior terminals, and reselling on the one hand to the millers for domestic consumption and on the other hand for export purposes. To make sure that its operations will be conducted without loss, the Food Administration has secured assurances from the Allies that they will purchase at the "fair price" all wheat delivered at the seaboard and placed at their disposal. To cover its cost of operation the Food Administration adds one per cent to the cost of wheat at the interior terminals when it sells (to millers or to exporters). United States Food Administration: Policies and Plan of Operation; Wheat, Flour and Bread. December 1, 1917, p. 32.

due allowance being made for new capacity. By their agreement with the Grain Corporation the mills pledged themselves to do their buying through its agencies and not independently, except where buying directly from farmers and local dealers at country points. shippers at country points were required to advise the zone agents in advance of their wheat available for shipment. More than two-thirds of the 20,000 country elevators entered into an agreement with the Grain Corporation by the terms of which the latter, upon payment of storage and carrying charges at the rate of two cents per bushel per month and guaranty to the elevator operators against a decline in the price of their wheat below the government basis, secured the right to control the disposition of the elevators' stocks of wheat, either as to retention at point of origin or, upon adjustment of returns, diversion of shipment from the destination originally intended. By this control of country shipments, by eliminating to a considerable degree the buying of the terminal elevators, and by strict attention to details of traffic reënforced by efficient car supply departments maintained for the aid of grain and flour shippers, the Grain Corporation was able to take the wheat from point of origin and to deliver it to the mills with but very little delay and burden of transportation and handling costs. During the first three months of operation by the Grain Corporation the receipts of wheat at the primary markets ran nearly 100,000,000 bushels behind the figures for the corresponding months of 1916 — a decline of nearly 60 per cent — but the rate of flour production during the same period was over 15 per cent larger than during the corresponding period for the previous year, notwithstanding the fact that in 1917 the total available stock of wheat was over 15 per cent less than the 1916 stock. For the entire crop year, from

July 1, 1917, to June 30, 1918, the aggregate receipts and shipments of wheat at the eleven principal interior markets and the seven chief export points were less than half the corresponding figures for the previous year. The output of flour, on the other hand, was, as nearly as can be calculated, almost exactly the same in the two periods—namely, slightly over 100,000,000 barrels in each year.¹

In order to secure an equitable distribution of the available wheat stocks among the mills of the several milling divisions it was necessary for the Grain Corporation to rearrange existing supplies by diverting local surpluses as far as possible from regions of excess to regions of deficit and to fill in the gaps by the importation of supplementary supplies from outside sources. A policy agreed upon with the Allies of treating the North American crop largely as a whole enabled the Grain Corporation to draw upon the movement of the Canadian surplus via the Great Lakes to the extent of about 24,000,000 bushels during the year 1917-18. About 4,000,000 additional bushels of wheat were imported from Australia, chiefly in small sailing vessels. Nearly 700,000 barrels of flour were also imported from these two sources.

IX

The achievements of the Grain Corporation in distributing the existing wheat stocks so as to prevent local scarcity and avoid waste and in conserving every bushel possible for the needs of the Allies, were accomplished in spite of serious car shortages and port congestion. In one important wheat growing region the transportation

¹ There are scarcely any reliable statistics on the aggregate flour production of the United States except those supplied by the U. S. Census of Manufactures at five-year intervals. I have followed the estimates of the Statistical Division Information Service of the Food Administration.

situation was actually improved by the action of the Shipping Board in providing tonnage for the movement of flour from the Pacific Coast to Atlantic ports and for export, and in another by the action of the Grain Corporation itself in reorganizing the wheat movement on the Great Lakes.

With the progress of the war and the shrinkage of shipping available to carry wheat from the North Pacific coast to its usual export destination, an extra burden had been thrown upon the transcontinental railroads to move wheat from this section to the eastern milling and consuming centers and to the Atlantic and Gulf ports for foreign shipment. The Pacific coast mills had also begun to build up a very large flour business in the southeastern states, where the product of the soft starchy wheats of Washington and Oregon was in high favor. The freight rates on these transcontinental shipments on both wheat and flour were very high and the establishment of a fixed wheat price based upon Chicago made the returns to the Pacific coast wheat growers relatively low. The organization of the grain trade in this section differs from that which prevails typically in other parts of the country in several essentials. Grain is harvested and handled largely in sacks instead of in bulk, and is stored in that form in flat warehouses instead of in elevators equipped with machinery. Because of that condition and also because of the peculiar climatic conditions of the principal wheat growing districts of the Pacific Northwest, the crop is marketed in a different manner and leaves the farm more cleanly in the early months of the crop year than in other sections of the country.

Now the calculation of the Pacific coast wheat price on the basis of the Chicago price for equivalent grades less freight and other shipping charges introduced no new element into the situation; it merely affirmed a condition which had existed for practically two years. None the less complaint at once arose on the part of the Pacific coast wheat growers and handlers against putting them on the basis of Chicago price, less freight. With the prospect of ocean transportation available owing to the construction of new ships at Pacific yards it became possible to establish a base price at North Pacific export points on an overseas basis instead of adhering to the former price based on rail transport to Chicago. Therefore, having got assurance from the Shipping Board of fairly reasonable water rates, the Food Administration on September 22 established a base price at Portland and Puget Sound ports for No. 1 Northern, or equivalent, at \$2.05 per bushel for bulk wheat with the usual premium for wheat in sacks. This meant an increase in the price to the grower in eastern Washington and Oregon of approximately fifteen cents per bushel over the price based on Chicago. A very large wheat crop in those states which would otherwise have seriously hardened the rail carriers was largely retained on the Pacific coast for grinding by the local mills and the product shipped by water instead of by the usual rail route overland.

The other critical transportation problem, aside from chronic car shortage, was presented by the conditions on the Great Lakes, where the available carriers had been seriously depleted by the action of the Shipping Board in transferring to the Atlantic such vessels as were suitable for use on the ocean. Lake facilities for grain shipment promised to be inadequate for the urgent ore movement plus the also urgent coal movement, plus the grain and flour movement. Grain shipments during the fall, at least from the Canadian Northwest, might be expected to be very large. To protect the large mills at

the eastern end of Lake Erie, as well as to keep a stream of wheat flowing to New York, the Grain Corporation made an agreement with the Lake Carriers Association operating American steamers and with the Canadian Association controlling Canadian steamers, by which they guaranteed to furnish at a maximum rate of 4½ cents per bushel, basis Duluth to Buffalo, all the carriers which the grain trade would require. In return for this the control of the grain trade on the Lakes was to be put entirely in the hands of the Grain Corporation agent at Buffalo as to the placing of boats for discharge at the elevators available there, so that boats should not be required to wait their turn behind particular elevators. The result was that for the first time in twenty years there were no blockades at the eastern end of the Lakes and a much larger use of the Lake facilities was therefore made possible. In fact the full ore movement was handled and the full amount of coal stocks at the northwest was transported during the season of open navigation, while in addition the entire grain movement was handled — all by a lake fleet which had promised to be inadequate.

\mathbf{X}

The Grain Corporation did not deal directly with the farmers, since it confined its wheat purchases to the stocks held in elevators and warehouses and to the daily arrivals at the terminal markets. None the less, the attitude of the farmers towards the fixed wheat price was an important factor in the practical operation of getting the wheat to the mills.

The theory of the stabilized price was that it relieved the growers of the burden of marketing wheat at the expense of necessary farm work for fear of a decline in the price, and also, by removing the expectation of a

higher price later in the year, would promote a more even marketing of the crop through the year. event justified this expectation of the Food Administration only in part. During July and August, while Congress was discussing the Food Bill and before the Grain Corporation entered the field and the Wheat Price Committee had reached its decision on a fair price — a period which offered unusual hazards to buyers, millers, and handlers, as well as leaving the farmer in doubt as to the final price outcome — the farm marketings of wheat were, as nearly as can be ascertained, 88,000,000 bushels; whereas for the ten weeks from July 1 the theoretical average as computed by the Department of Agriculture for farm marketings for a crop of this size should have been 144,000,000 bushels; the actual marketings were apparently 56,-000,000 bushels behind the normal for the crop.

The failure of Congress to pass the Food Bill, as the President had urged, in time to permit the controlling agencies of the Food Administration to be organized by July 1, in order to be ready when the new crop should begin coming on the market, had delayed the beginning of operations by the Grain Corporation until early in September. Over two months had elapsed during which the winter wheat movement was already under way, marked by a price fluctuation of fifty cents per bushel. When at last the stabilized price went into effect, many grain dealers faced a loss on the wheat they had bought. Many farmers were discontented because they could not sell their entire crop at the high prices made by the uncontrolled influences which had dominated when the previous year's crop had been exhausted and the market was without any balance wheel. The crop was slow to move. During the greater part of September the

¹ Estimated from weekly reports to the Food Administration Grain Corporation.

farmers in the principal grain growing sections were apparently unwilling to sell much wheat; especially was this true in the Northwest, where under the stimulus of exceptionally high prices the record-breaking oats crop was being rushed to market. There was also a large corn crop to take care of and corn prices were establishing new high records. The farmer, in consequence of being relieved from the fear of a falling wheat price which in former years had stimulated him to dispose of his crop in the harvest rush, sometimes even to the neglect of necessary farm work, was enabled to take advantage of the unusually favorable weather conditions for fall plowing and seeding. Unquestionably the stabilized wheat price was a factor in forwarding the condition of farm work, which had almost never before been as well advanced as in the fall of 1917; especially in the spring wheat states fall plowing was of unusual extent.

All these influences made for a lighter movement of wheat than the normal crop rush. Nevertheless, the total farm marketings from September 6, when the Grain Corporation commenced business with its stabilized price, up to December 29, were 315,000,000 bushels, against a normal computed average of 270,000,000 bushels for this period. In seventeen weeks, under the Food Administration's fixed price plan, farm marketings had been so enlarged as practically to overcome the deficit below the normal rate for the first two months of the crop year.

A source of constant irritation among the farmers during the 1917–18 season was the interposition of the new Federal wheat standards and Federal supervision of grading and inspection at the primary markets. After ten years of agitation, largely by the representatives of the farming interests, Congress had at last enacted the

¹ Reports to Food Administration Grain Corporation.

requisite legislation, and the Department of Agriculture promulgated uniform wheat standards which were made mandatory upon the grading of all grain moving in interstate commerce. These new grades prescribed rigid standards for moisture content and uniformity of quality, and had the effect of penalizing sharply grain which contained inseparable impurities or which otherwise was below standard. They were injected into the situation at the very beginning of the crop movement for 1917. The unsettlement of the established trade could scarcely have been emphasized more sharply by any other combination than that of a government stabilized price and a government standardized grade replacing the former standard and the former methods. The rigidity of the new system was emphasized by the fixed price differentials between the several grades which the Grain Corporation had found necessary to establish in order to maintain the stabilized price with uniformity and definiteness. Many country dealers, unfamiliar with terminal grading under the Federal standards, in order to make themselves safe, were unduly rigid in the grading of country deliveries. Naturally this gave rise to much complaint under a fixed price system. Gradually these inequalities were smoothed out. and the Food Administration in many cases required the country dealers, under pain of forfeiture of their licenses, to make restitution to the farmers where they had been too severe in their interpretation of grades and dockage. In order to secure the farmers the full value of their grain through competition the Grain Corporation left as wide a field as possible for the purchase of wheat by sample; all grades below No. 3 were bought on the basis of actual worth and not on the basis of fixed price differentials.

XI

The tendency for growers to hold back their wheat for an advance in the market or what they consider an "advance," offers material for an interesting study in popular psychology. The farmer had always hitherto been accustomed to an unhampered market and he continued to look for an unhampered market. The idea that the price would advance through the season was normal with him: it was difficult for him to realize that a stabilized price system would not permit such an advance. The idea of an advancing price dies hard. The reasons are, perhaps, not far to seek; the farmer is close to the growing crop: he sees it being winter killed, or damaged by rust, insect pests, or bad weather, and he reasons that the price must advance because of the shrinking supply. Half a year of price stability was too short a period to accustom the farmer to the idea of an unvarying price for his product or to induce him to market it freely. It was an easy transition for him to look to Congress for an increased price.

During January, 1918, severe winter weather and lack of car supply slowed up the farm marketings of wheat; this slowing up was soon to be intensified by a new influence. In January, Congress began an ill-advised agitation for an increase in the guaranteed wheat price for the crop of 1918. The result upon the crop movement was at once apparent: farm marketings for

1 Agric	CULTURAL APPE	ROPRIATION BILI	L — H. R. — 0054
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Reported in House	Jan. 21, 1918
Passed House	Feb. 1, 1918
Referred to S. Com. on Agriculture and Forestry	Feb. 4, 1918
Reported back with amendments	Feb. 11, 1918
Passed Senate	Mar. 21, 1918
Sent to conference	Apr. 1, 1918
Conference report agreed upon	July 6, 1918
Vetoed	July 12, 1918

the season (from July 1) which had been practically even with the average on December 29, had by April 6, fallen over 30,000,000 bushels below the normal for a crop of this size. In spite of the car shortage and bad weather, the farm marketings of corn, oats, and barley, the prices of which were uncontrolled, ran heavily above the seasonal average during the most of the winter period.²

The agitation in Congress for an increased wheat price took the form of an amendment to the Agricultural Appropriation Bill for the fiscal year 1918-19. Several amendments were offered, but the one which ultimately prevailed in Congress, and which may be taken as typical, proposed a basis minimum guaranteed price for the 1918 harvest of \$2.50 per bushel for No. 2 wheat (the most common grade) at country stations, as compared with the government fair price of \$2.20 for No. 1, Chicago basis, for 1917-18. The Senate voted in favor of an amendment in about this form some time during April. To forestall Congressional action and thus anticipate events which might hamper the Food Administration in its task of getting the 1917 crop marketed, President Wilson, under authority conferred by Section 14 of the Food Act, issued an executive order on February 21, 1918, establishing the government guaranteed price for the crop of 1918 on the same basis as the government fair price for 1917-18, namely, \$2.20 per bushel for No. 1 Chicago, with appropriate premiums and discounts for other markets and other grades.

Congress was insistent, however, and the Senate conferees succeeded in inducing their House colleagues to agree upon an amendment guaranteeing a uniform minimum price at *all* country stations, irrespective of

¹ Reports to Food Administration Grain Corporation.

location or distance from terminals, of \$2.40 per bushel for No. 2 wheat of the crop of 1918. The Agricultural Appropriation Bill containing this amendment was passed by Congress on July 6. It was vetoed by the President.

A general 25 per cent advance in freight rates by the Railroad Administration necessitated a readjustment in the government's buying basis for the new year however. Under authority contained in an executive order of June 24th the Grain Corporation increased the prices at terminals, as announced February 21, so as to establish a minimum of \$2.00 per bushel for wheat loaded upon railroad cars at country stations in the least advantageously located points in the country, with correspondingly higher prices for places less remote from market. However this is a matter beyond the scope of the present paper.

XII

Proceeding now to a consideration of the problems of the milling industry under Food Administration control, let it be recalled that the abnormal conditions which prevailed in the spring and summer of 1917 had resulted in something approaching a trade deadlock. So long as the government fair wheat price remained undetermined most mills were unwilling to buy freely and confined themselves to comparatively limited operations. During July and August the rate of milling activity for the whole country was less than 75 per cent of the normal for that season. But when the government wheat price was announced, August 30, the mills entered the buying market and as soon as wheat

¹ Even in September some of the large Minneapolis mills were forced to shut down for lack of wheat.

began to move freely from the farms milling activity was resumed. A very large flour output was secured during the last four months of 1917, record figures being established for part of that period.

XIII

The result was that flour prices were greatly reduced and the gaps in the commercial stocks filled up. The agreement mills were able to absorb most of the wheat offerings at the government fair price. The limitation of profits to twenty-five cents per barrel, reënforced by the declaration of the Food Administration that profits in excess of that figure for the year's business would be deemed unreasonable, had the effect of keeping flour prices in most parts of the country approximately on the basis of the government price of wheat. During the period of vicious speculation of the spring and summer of 1917, before the regulation of the Food Administration became effective, flour prices had ranged from \$12.00 to \$16.00 a barrel at the mill door. Under the régime of control wholesale flour prices were reduced to from \$10.00 to \$11.00 a barrel for most mills. This was an achievement of the first importance, and, whatever the offsets and inadequacies, is sufficient to justify the work of the Food Administration and the Milling Division.

This method of price regulation, however, based upon cost of production plus a stipulated margin of profit per unit of output — a margin which soon came to be interpreted as a minimum rather than a maximum — was clearly open to objections. It did not promote efficiency of operation; it offered dishonest and unpatriotic millers opportunity and temptation to pad their reported costs. The original suggestion of an operating

differential, to include cost as well as profit, limiting the cost figure to seventy-five cents per barrel, had been dropped because of the extraordinary range of costs within the industry, embracing concerns from the largest to the smallest. The profit regulation as adopted was a simple expedient of a rough and ready kind designed to meet the necessities of the situation. It was, perhaps, the only method of regulation which offered a fair chance of success. The surprisingly effective in the main, it led, none the less, to serious difficulties.

XIV

Some unexpected circumstances rendered the problems of regulation more complicated than had been expected. Fundamental to the entire situation was the fact that the wheat crop of 1917 was the smallest in years, smaller even than had been estimated in August when the Food Administration announced its policies of control. One effect of such a short crop was to abridge still further the scanty range of competition which the regulation had left undisturbed. The crops of England and France were also much smaller than had been expected and the gravity of the export problem was correspondingly increased. With added pressure resulting from the need of prompt flour shipments abroad it became necessary to stimulate milling activity to as rapid a rate as possible. The Food Administration had originally hoped that it would be possible to operate the mills at a fairly even rate of production through the year, but in fact a very large part of the flour production of the mill year — something like 52 per cent — had to be crowded into the four months, September, October. November, December.² Yet throughout this period

¹ See page 47.

² From estimates by U. S. Food Administration, Milling Division.

domestic buying demand was insistent and far exceeded the capacity of the mills to keep pace with it.

A marked reduction in operating costs resulted from this high rate of milling activity. A peculiar consequence was that many mills found it difficult, almost impossible, to reduce their prices for flour and feed rapidly enough to keep their profit margins within the allowable maxima — twenty-five cents per barrel on flour and fifty cents per ton on feed. Flour prices, tho tending downward, did not at once fall to a basis strictly commensurate with the lowered wheat price established by the Wheat Price Committee. Wheat feed prices, especially, failed to recede; indeed they tended to advance, reflecting the high prices then current for feeding stuffs generally. Corn, oats, and cotton seed cake and meal ruled at very high prices towards the end of 1917 for various reasons. The question arose whether it would be wise to attempt to force down the price of mill feed in view of the high prices of competing feedstuffs and the scanty supply of mill feed resulting from the short wheat crop. Of course, any reduction in feed prices would tend, pro tanto, to increase flour prices. After much deliberation it was finally decided to issue rules (promulgated by the Milling Division, December 18, 1917) fixing maximum prices for mill feeds. prices were to be calculated by each mill and were based definitely upon the cost of wheat at the mill door; the maximum wholesale price per ton for bran, in car lots bulk at mill, was set at 38 per cent of the average cost to the mill of a ton of wheat, as calculated from the prices paid during the previous month; fixed differentials based on the bran price were established for the other mill feeds.

This attempt to control feed prices proved largely abortive. To begin with, the Milling Division specifi-

cally exempted outstanding feed contracts from the operation of the rule, which therefore did not become effective as to prohibition upon shipments at the old prices until a period of time had elapsed (from two to six months, as it proved) sufficient for the mills to complete the fulfillment of existing contracts. No adequate reason has been given, nor is any forthcoming, why outstanding feed contracts should have been exempted from the operation of the rule as promulgated; especially since on the very same day a rule was announced which required the cancellation of a very considerable proportion of the outstanding flour contracts. In the second place, the 38 per cent rule referred only to bulk prices in car lots, whereas many mills did a considerable feed jobbing and even retail business, especially those in the country districts. Higher prices were charged for feed sold on a jobbing or retail basis and the permissable margins for this type of service were very inexactly defined or understood. The addition of the cost of sacks increased the average price of feed by four or five dollars a ton. Again, very little attempt was made to control the activities of the feed jobbers; in the nature of the case it was difficult to bring them under effective regulation. The Milling Division regarded them as beyond its province and the other regulating agencies of the Food Administration, with the exception of the state Food Administrators, were slow to develop the machinery of control. In the face of the blighted corn crop of 1917 and the almost complete breakdown in railroad service, feed dealers could get almost any prices they asked during the winter of 1917-18. Consequently complaint of "profiteering" was very general, especially in the wheat growing regions, where the farmers felt aggrieved because, while the price of wheat had been reduced from the high quotations prevailing dur-

ing the summer of 1917 by the action of the Food Administration, mill feed prices had remained high and in many cases had increased, even after the issue of the 38 per cent rule. There was also complaint on the part of those mills which did keep within the 38 per cent rule against those which did not; western feed was frequently selling in eastern markets at higher prices than the superior local product. It was not until towards the end of the winter that the Food Administration took any adequate action to restrain profiteering in feeds. The Enforcement Division (presently to be described) was able to do some effective work, especially in the Southwest, where conditions had been particularly bad, and considerable improvement was brought about through coöperative action by millers, jobbers, state Food Administrators and other interested parties. The difficulties of the situation were admittedly very great, but on the whole the Food Administration cannot be credited with conspicuous success in its handling of the mill feed problem.

XV

Coincidently with the issue of the 38 per cent feed price rule, the Milling Division promulgated a new rule governing the ratio of extraction of flour and feed. The September and October reports of the agreement mills had shown a prodigal use of wheat per barrel of flour produced; too much feed and too little flour were being made from a given amount of wheat. The reason was that the mills were making a relatively large proportion of expensive "high patent" flours which yield a large amount of offal as compared with the cheaper grades of "straight" flour. By the new rule the amount of wheat that might be used in making a barrel (196 pounds) of flour was reduced from a maximum of 285

pounds for the better grades, as originally established,1 to a maximum of 264 pounds for the same grades, with appropriate differentials for the lower grades — a rate of flour extraction equivalent to 74 per cent. This was avowedly a measure for conservation; the original maximum of 285 pounds, adopted in August, was, perhaps, the best that could have been fixed at the time. The great variation in character of mechanical equipment and milling skill between different mills made it impossible to insist at the outset upon more rigid standards of extraction. But the Milling Division had in the meantime systematically urged and taught the backward mills, by appropriate descriptive matter, blue prints, and the like, and through a staff of mechanical experts, so to improve their standards that the effectiveness of the entire industry was brought measurably up towards the best practice - another notable achievement. It was only with the progressive improvement in mechanical equipment, which was thus stimulated, and the increasing realization by the millers generally of the need of regulation and their increasing willingness to coöperate, that the 264 pound rate became possible. Under this regulation the amount of wheat used per barrel of flour was greatly reduced.

Of greater significance, perhaps, than the increased rate of extraction was the prohibition imposed by this same rule upon the separation of flour into several grades — patents, clears, straights, etc. After the effective date of the rule (December 25, 1917) not more than 5 per cent of "low grade" might be removed from the flour as ground; the remaining 95 per cent had to be sold as a uniform "straight" flour.² Of course, this

¹ See page 10.

² This was one of the measures which Mr. Hoover had advocated from the first; the other was the establishment of a fixed operating differential to include millers' costs and profits.

played havoc with established brands, since the product of all mills was now placed upon a basis of uniformity, except, of course, as they used different kinds of wheat and could command varying grades of milling skill. However, it immensely simplified the problem of price regulation, since a standard flour now replaced the multiplicity of grades and brands which had formerly baffled attempts at direct price control. Thus the way was passed for the next forward step in the technique of food administration in the milling industry.

XVI

This was not to come at once, however. Further experience was necessary under the "cost plus" method of price regulation, and to this we must now give attention.

Towards the end of 1917, many mills found themselves in possession of profits considerably in excess of the allowable maximum of twenty-five cents per barrel. Some had already even exceeded this rate on their entire accountable allotment for the entire season. This situation raised the question of the proper interpretation of the profits rule. Did twenty-five cents per barrel maximum profit mean twenty-five cents per barrel in each month, or twenty-five cents per barrel figured on the whole season's operations? At the outset the Food Administration took the view that if in any one month the profits of an individual mill were in excess of twentyfive cents per barrel, its selling price should be forthwith reduced so as to bring its current profits within the twenty-five-cent maximum; profits in excess of this figure were not to be accumulated in the earlier months

¹ Subsequently (about March 1, 1918) even the separation of the 5 per cent of low grade was prohibited. Thereafter all flour made was required to be 100 per cent straight flour.

against decreased profits or possible losses expected to occur in subsequent months. However, the concentration of the period of maximum grinding within the first four or five months of Food Administration control indicated that profits would perhaps be very meager in the lean months to come. In other words the milling industry, always a seasonal business, was unusually compressed during this year. So great, moreover, was the variation in rate of milling activity and, therefore in costs and profits, from month to month for individual mills, that the Food Administration was forced to the conclusion that the profit limitation could not be applied strictly to each individual month or to any short period. Meanwhile the position was being strengthened of those who maintained that the limitation of profits to twentyfive cents per barrel was equivalent to a virtual guarantee of twenty-five cents per barrel as a minimum return.

XVII

Any method of regulating the price of flour upon the basis of cost plus stipulated or maximum profit is predicated upon a thoro audit of millers' costs. Partly to perform this function and partly for other reasons, the Milling Division established at its headquarters in New York an auditing department. The task, obviously, was a large and difficult one. The duties of the department were confined at first to checking the monthly cost reports, at the New York office, as regards clerical correspondencies and discrepancies. Its energies were also devoted in part to working out a system of flour mill accounting designed primarily for the use of small mills and recommending its adoption by the

Over 60 per cent of the total flour output of the United States for the season July 1, 1917, to June 30, 1918, was produced in the five months, September, October, November, December, January.

trade (an important reform measure, it may be added), and to exercising a general supervision over the reporting mills by correspondence. This was useful work and accomplished some positive results. Little or no actual field work or effective check on loose or dishonest practices was attempted, however. The Milling Division took the view that it was not its business to police the industry and that to discipline millers or attempt anything of the sort would perhaps defeat that spirit of voluntary coöperation which it was anxious to develop. It declined to avail itself of the facilities for independent auditing offered by the Federal Trade Commission. Towards the end of the winter the various divisional offices of the Milling Division, one in each of the nine milling centers of the United States, employed a limited number of inspectors and accountants to visit the mills, check their yields, and assist them in their accounting problems.

Not a few millers took advantage of the situation and loaded their cost reports with improper items. came to believe that they would never be investigated or molested if they should pad their cost reports. Such items as new construction and equipment, largely increased salaries to officers (in some cases made retroactive to include a fiscal period closed before the beginning of Food Administration control), bad debts of ancient standing, excessive depreciation charges, losses on miscellaneous outside investments, etc., were added to current costs of production and so charged to the consuming public. Under the conditions of demand which then existed prices inflated in this way could easily be obtained for the flour; in fact, flour could be sold for almost any price, limited only by the flexibility of the seller's conscience.

XVIII

A not infrequent method of evading the spirit of the agreement was that of setting up a "jobbing department," selling the whole output of the mill or a large part of it to the jobbing department at a profit within the twenty-five cents per barrel rule, and then getting all the additional profit possible from so-called jobbing operations, limited only by the more liberal jobbing regulations, which authorized profit margins varying from twenty-five cents to seventy-five cents per barrel. according to the nature of the service performed. Out of some 1500 mills reporting their costs to the Food Administration under the voluntary agreement 439 had separate jobbing departments on June 18, 1918. many cases these jobbing departments were new creations, designed to cover up profits in excess of the allowable maximum. It was an undoubted weakness in the rules which permitted and perhaps even suggested the creation of these bogus jobbing departments.

On the other hand it must be recognized that many mills which had regularly done some jobbing and retailing did not take advantage of the permission to segregate their jobbing business from their merchant milling operations. Indeed, it had even been hoped and expected that the larger mills which had segregated their jobbing business in the past would, for Food Administration purposes, consolidate their manufacturing and selling costs under a single return and not take a jobbing profit in addition to their milling profit. A maximum profit of twenty-five cents per barrel was considered ample return upon the entire business of such concerns—jobbing and merchant milling combined. Many of the very large mills did, in fact, consolidate their milling

and jobbing returns, especially the Minneapolis mills which operate extensive distributing warehouses. Not so many mills agreed to handle their business in this manner, however, as had been hoped.

XIX

The effective control of this and other kinds of abuses was hindered by some shifting of jurisdiction between the Food Administration offices at Washington and the Milling Division headquarters at New York, and perhaps by the fact that the Milling Division itself was administered by millers engaged in active business operations and having the point of view of private interest rather than that of the unfettered public official. In November, 1917, the Food Administration established an Enforcement Division at Washington whose duty was to see that the regulations of the Food Administration were enforced. The difficulties of this task were admittedly very great; the inspection of the millers' monthly cost reports was for some time confined to a mere statistical examination and audit, without serious inquiry into the underlying facts. In this matter, as in all the problems of regulation, the nature of the task became apparent only with experience; the best mode of dealing with the situation could only be developed gradually.

In February the activities of the Enforcement Division were extended to the flour milling and flour jobbing regulations. A widespread inquiry was made as to the methods followed by the millers in the preparation of their monthly cost reports and many cases of irregularity and some of fraud were detected. Largely as a result of these investigations a marked reform was brought about: the millers in general responded will-

ingly to the new and more careful methods of regulation initiated by the Enforcement Division. For the purpose of getting comprehensive and fairly detailed information all mills of a daily capacity of 75 barrels and over were required to submit a consolidated statement covering the operations of the first seven months of operations under Food Administration control—September, 1917, to March, 1918. This was followed by a similar consolidated report on the three months, April, May, June, 1918—thus completing the portion of the season's business for 1917-18 coming within the period of control. These statements followed closely the general form of the original monthly cost reports, with the addition of a certain amount of itemization deemed essential, e.g., under the captions: milling expense, selling expense, general expense, reserves, jobbing business, etc. At the same time definite instructions 1 were issued designed to clarify the whole accounting problem and indicating the basis of profit determination to be followed in the settlement of the year's accounts between the millers and the Food Administration. Millers were permitted to correct in the consolidated statements errors and misstatements which had appeared in the earlier monthly reports, without prejudice.

Those mills, relatively a small per cent of the total number, whose reports indicated that their profits on the season's business had been in excess of the maximum allowable rate of twenty-five cents per barrel, were required to give up their excess gains, either by the sale of flour, to the government at a nominal price, or by setting up an equivalent credit to the government's purchasing agencies on their books. The Enforcement Division also undertook a thoro-going audit of the accounts of many of the larger mills; a considerable

¹ Milling Division Circular No. 1310, May 15, 1918.

number of mills, on their own initiative, called in the services of auditors and chartered accountants in the preparation of the consolidated statements. The opportunity to remodel their statements was availed of in good faith in most cases, and served to bring about a general conformity to the spirit of the regulations without resort to stringent measures. The number of cases of positive deception or deliberate profiteering proved, in the end, to be relatively small.

XX

One of the most troublesome questions in the whole problem of profit regulation and one which occasioned a great deal of discussion and much misunderstanding concerned the method of handling the items of income tax and excess profits tax in the millers' monthly cost reports. Through the representations of overzealous members of the Milling Division in August and September, 1917, many mills were induced to enter the voluntary agreement with the understanding that the profit limitation of twenty-five cents per barrel meant that they would be permitted to make twenty-five cents per barrel net after all deductions, including taxes. November the Food Administration through the Milling Division issued a positive declaration to the contrary, so far at least as the excess profits tax was concerned. None the less the idea of a net divisible profit of twentyfive cents per barrel persisted and many mills, including some of the largest, charged in their monthly cost reports as expense items against current costs of production reserves set up in anticipation of excess profits tax payments.

The act by which the excess profits tax was imposed was enacted on October 3, 1917, very shortly after the

milling regulations had been instituted. Few persons were at once aware of the significance and importance of this tax. Altho the earlier act of March, 1917, contained an excess profits tax, that in the later law was much more far-reaching. It was inevitable that adjustment to it should be difficult and that unexpected problems should arise.

Under the legislation of October, 1917, the procedure as to allowing excess profits taxes and income taxes also to be charged against cost of production in the accounts of mills would seem, as a matter of principle, to be clear. Excess profits and income taxes are to be regarded not as items of expense — not as charges which are expected to be passed on to the consumer — but as taxes to be paid out of the earnings and incomes of those on whom they are directly levied. In other words, all such taxes should come out of income and should operate as deductions from income. The Food Administration, even tho it limited the profits of millers to a maximum of twenty-five cents per barrel, in consistency was obliged to hold that the profits were taxable like other producers' net earnings.

Nevertheless, there were unexpected and unequal results from the application of this principle, especially as regards the taxes on excess profits. They ensued more particularly from the circumstance that the taxable year for which the mills made their tax returns were not uniform. Many mills made returns for the calendar year 1917; some for a fiscal year running from July 1, 1917, to June 30, 1918; others for a fiscal year from September 1, 1917, to August 31, 1918, and so on. A mill which made its return for the calendar year might easily be in a position — and this happened for a considerable number — in which the whole of its net earnings after September 10, 1917, became subject to a tax

of 60 per cent. This high rate of tax became applicable if during the earlier part of the year, before September 10, its profits had been over $33\frac{1}{3}$ per cent upon its invested capital; since under the provision of the Act of October 3, 1917, all earnings in excess of $33\frac{1}{3}$ per cent on capital became subject to a tax of 60 per cent. Many mills had made such large profits during the earlier part of the year that their ensuing profits became taxable at this high rate. At the same time, during the period after September 10, 1917, the profits of the mill(s) were restricted, being subject to the regulation by which they were not to exceed twenty-five cents per barrel, and it was these "restricted" profits that became taxable at the 60 per cent rate. As compared with a mill in this position, another whose taxable year was not the calendar year, but ended on June 30, 1918, or August 31, 1918, might be taxed lightly upon its profits earned during the period of regulation. Such a mill would pay a rate of tax based upon its earnings for the taxable year 1917-18, presumably kept within moderate bounds by the regulations of the Food Administration, and therefore presumably taxed at a low rate.

Other unexpected and apparently inequitable results ensued from the operation of the excess profits tax law. Some were connected with the different rate of capitalization of different mills, due to their varied history (in the past). These brought it about that mills with low capitalization were generally more heavily taxed than mills with high capitalization. Certain mills again, unlike the majority (?), had made small profits during the first half of 1917 and, having been assigned a heavy grind in the autumn of that year, made larger profits during the food regulation period, with a consequent tax rate different from that of their competitors.

This whole problem of the incidence of the excess profits tax and income tax was referred by Mr. Hoover to a commission headed by Professor F. W. Taussig, appointed in March, 1918, to consider some of the problems of regulation of the milling industry and to make suggestions for improvements in the regulations already issued and for the recasting of the whole method of regulation for the crop year beginning July 1, 1918. This commission gave much attention to the question raised by the interposition of the excess profits tax upon the milling regulations issued by the Food Administration. It was impressed by the inequalities resulting from the rigid application of the Food Administration's announced intention not to recognize excess profits tax payments as items properly chargeable against costs of production by the mills in their accounts with the government, but it felt itself unable to attempt to readjust these conditions or to bring about identity of treatment for the different mills. It therefore reported that excess profits taxes, and income taxes also, should not be regarded as items of expense but as public levies which must come out of the profits of producers, as had been the normal case with all such taxes. The Food Administration acted promptly upon this recommendation and on May 15, 1918, announced to the trade that these taxes must be borne by the producers and not charged to the public. In one respect, however, the discussions before this commission of inquiry brought about a modification and readjustment in the operation of the excess profits tax. As has already been explained, many mills made profits larger than the allowable maximum during the closing months of 1917 because of the rush of grinding operations at that time. These large profits, in excess of twenty-five cents per barrel, were necessarily treated by the Food Administration as "paper profits"; since, if maintained through the season, i. e., until June 30, 1918, they became subject to refund in one of the forms already indicated. possible, however, that the Treasury Department would consider the profits made during this period as taxable to their full extent, irrespective of the circumstance that the Food Administration would compel mills to cut them down sooner or later. As a result, however, of conferences between legal representatives of the Food Administration and of the Treasury Department, an arrangement was made by which these "paper profits" (in excess of twenty-five cents per barrel) were considered as not necessarily part of the taxable income of the mills, but as subject to readjustment and abatement after proper verification and certification by the Food Administration, subject to suitable regulations by the Treasury Department.

XXI

The results of the year's milling operations under the cost plus method of regulation, while as satisfactory, perhaps, as could have been expected, indicated abundant opportunity for improvement. It was possible to formulate new plans of regulation with greater confidence because of the circumstance that the minimum price to the producers for wheat of the 1918 crop was a matter of formal government guaranty—a feature entirely lacking in the 1917–18 program. To this fundamental measure the entire food program, so far as wheat and flour were concerned, could be adjusted.

The probability of a continuance of the war for at least another twelve months made it prudent to enforce a continuing measure of conservation of wheat flour in the United States during the crop year 1918–19, in spite

of the increasing stocks of wheat in Australia and the Argentine and the very large prospective crop in this country in 1918. This implied a continuing limitation upon competition in the manufacture and sale of flour. The large and fairly evenly distributed wheat crop, taken in conjunction with the fact that the functions of the Grain Corporation became somewhat different under the price guaranty arrangement, made it practicable to relax somewhat the restrictions upon the grain trade and to allow a wider range of competition there than had been possible with the short crop of 1917.

It is beyond the scope of this paper to enter upon a detailed exposition of the new arrangements which became effective in July, 1918. Suffice it to say that the Grain Corporation announced a schedule of wheat prices which it was prepared to pay at the principal terminal markets, based upon the minimum government guaranty of \$2.00 to the farmer, so arranged that the producers in the least advantageously situated districts could realize approximately \$2.00 per bushel for their wheat at country shipping points. The control by the Grain Corporation of country elevators, as to retention and diversion of shipments,2 was relinquished and shippers were permitted to sell to whom they would. The mills were also allowed to buy from whom they pleased and to pay any price they pleased; of course, the lower range of competitive bidding was established by the offer of the Grain Corporation to pay at least the government guaranteed minimum. As a matter of fact, removing the fetters from the free play of commercial initiative led to a premium of several cents per bushel over the government minimum being paid for wheat during the early weeks of the new crop movement, in

¹ The government guarantee then was \$2.00; the President by proclamation subsequently made the figure \$2.20.

² See page 18.

spite of a movement the size and rapidity of which broke all records.

The principal limitations placed upon the mills affected the prices which they might charge for their products, the quantity of wheat which might be used in making a given quantity of flour, and the kind of flour which might be made. The Food Administration had got over its scruples concerning its own powers as to price-fixing and imposed upon the mills a fixed operating differential or margin — a figure by which the combined prices of flour and feed might not exceed the price (reckoned on the government purchasing basis) of an equivalent amount of wheat. The ratio of extraction was continued at 74 per cent (i. e., 4.4 bushels of wheat per barrel of flour), and the differential for the combined prices of a barrel of flour and the corresponding amount of offal (about 68 pounds) above the price of 4.4 bushels of wheat was set at \$1.10. In other words the differential of \$1.10 per barrel of flour included costs and profits. Thus, if the government price for No. 1 Northern wheat at Minneapolis were set at \$2.20 per bushel, the price of 4.4 bushels would be \$9.68, and the combined prices of flour and feed at the mill door might not exceed \$10.78; further, if the government named price for mill feed (at say 41 per cent of the price of wheat) averaged \$30.00 per ton, or one and one-half cents per pound, at that point, the maximum price for flour at the mill door would be \$9.76. These regulations were easy to police since prices could be readily checked by the reports required from flour jobbers and buyers. Furthermore, they were compulsory; there was no element of voluntary agreement in them, as with the arrangements of 1917-18. Hence it became possible to dispense with the elaborate and expensive machinery of the Milling Division, which accordingly went out of existence. In its stead a milling section, with a representative miller at its head, was established in the new Cereal Division, of which the Grain Corporation also became a part.

It is too early yet to form any conclusion as to the efficacy of the new plan of regulation, but at this writing (August, 1918) it seems to be working well. There has been very little, if any, complaint as to inability of farmers to secure the full guaranteed minimum price which the Grain Corporation stands ready to maintain at all times and in almost all places. If, through lack of competitive bidding at local points, farmers fail to secure the full government price, the Grain Corporation will accept direct consignments, paying the shipper at least \$2.00 per bushel f. o. b. shipping point, less commission. The fixed differential mode of controlling the price of flour has the advantage of simplicity; it is easily understood in general principle; it definitely establishes maximum prices. Its application was possible only with the fixed base price of wheat to the producer and the requirement of a uniform grade of 100 per cent straight flour; 1 the fixed wheat price became the datum point from which the prices of flour and feed could be reckoned; under the "100 per cent straight" rule "flour is flour," while before this requirement there were as many different grades as there were mills.2

SUMMARY AND CRITICAL ESTIMATE OF RESULTS

Broadly speaking, the problems of the Food Administration at the outset of its career in the regulation of the wheat and flour trade were: (1) to attain price stability, for the protection of both producer and consumer; (2)

¹ See page 45.

to enforce conservation, in order both to guard necessary supplies for home consumption and to save for export; and (3) to distribute the available wheat to the mills so as to maintain relative equality among them and secure their milling coöperation. How far did the Food Administration realize its aims in meeting these problems in the crop year, 1917–18?

XXII

1. The stabilization of wheat and flour prices speaks It is a matter of record and represents an for itself. achievement of the first importance. The efforts of the Food Administration to control and eliminate speculation in wheat and its products may be said to have been almost completely successful. The grain exchanges at once complied with the request to suspend dealings in wheat futures; the spot market practically disappeared under a system where the mills did all their buying in terminal markets through the Grain Corporation. The licensing of all elevators and mills having storage facilities, and the limitation of the storage period to thirty days, put out of business the line and terminal elevator companies, so far as the speculative handling of wheat was concerned. More effective still was the practically universal agreement entered into by the millers not to pay for wheat a price in excess of the fair price adopted by the Food Administration for government purchases. This fixed the upper limit for prices offered by domestic purchasers; export buying was confined to the Wheat Export Company, the Grain Corporation, and the representatives of neutral nations — all acting in concert. There was no place for price speculation; the almost universal control by the Grain Corporation of the movement of wheat from farm to mill and to the seaboard left no scope for speculative activity; it simply became an unremunerative business.

Only to a slightly less degree did the Food Administration succeed in eliminating speculation in flour. All licensed mills (some 6000 in total) were prohibited from taking orders for flour more than thirty days in advance of shipment, and from knowingly selling to any buyer such quantities of flour as would give him more than enough for his requirements for a reasonable period of time (defined by rule as thirty days). A national flour distributor was appointed, who got the flour jobbers in the most important consuming centers to agree upon maximum profit margins, based upon pre-war standards. Fictitious sales between a number of brokers or other intermediaries in the distributive chain, and resales within the trade with successive price enhancements, were strictly prohibited. Altho there were sporadic cases of violations of these rules, the response of the trade in general was excellent, and flour was kept moving in as straight and direct a line as possible between producer and consumer. After the first few weeks of Food Administration control there was a marked reduction in the price of flour at wholesale and this reduction was generally reflected in retail and bakery prices. The mill door price of flour at Minneapolis remained fairly constant at a figure around \$10.00 per barrel from early in November, 1917, until the close of the crop year, with a tendency downward rather than upward.

Of course, the wisdom of the whole policy of price stabilization may be, has been, questioned by some economists, who express skepticism as to its practical utility as a war measure. Without entering upon a discussion as to the relative efficacy of the system of price variability and price fixation as types of economic organization in war time, a few words may not be out of place at this point as to the desirability of a stabilized market in the wheat and flour trade in 1917.

The case against price-fixing, i. e., the establishment of maximum prices, is easily stated.¹ It is urged that to fix a maximum price for a commodity defeats, or at least retards, the normal equilibrium of demand and supply; that by fixing the upper limit to the figure which the producer may expect for his goods, production is, pro tanto, checked at the very moment when it needs to be stimulated. Leave the market alone, let buyers pay what price they will, and the price of the commodity in question finds its natural place in the whole scheme of prices and settles at that point which will exactly equate the supply (or production) to the demand, as measured by its price relative to all other prices whatsoever.

The matter is not so simple as this, however. argument assumes a degree of flexibility in consumers' demand schedules and in the organization of production. as little in accord with the facts as is the tacit implication that the psychological aspect of extreme price variations is a matter of no consequence and may safely be ignored. Nor is it necessarily true that, once a policy of price-fixing is embarked upon there is no logical stopping place — that all prices, broadly speaking, must be worked out in nice adjustment to each other. A more moderate statement, and one nearer the truth, is that all interference with the normal operation of economic forces is to be recognized as an evil and that such interference should proceed no further than is necessary to attain the end absolutely required. Each case must be met as the necessity arises, and such action taken as the totality of social forces dictates.

¹ For example, see W. C. Clark: "Should Maximum Prices be Fixed?" Bulletin of Queen's University (Canada), 1918.

However all this may be as to price-fixing in general, it should be emphasized, in order to prevent further misunderstanding, that in the wheat and flour market in 1917, the normal forces influencing the price system had utterly broken down. The complete disruption of the channels of transportation between the world's more distant wheat fields and the great consuming markets of western Europe, a regrettable incident of the war, had thrown upon the crops and markets of the United States and Canada the burden of sustaining the whole impact of a demand for breadstuffs probably unparalleled in modern times. It was a burden too great to be sustained and the American marketing system, excellent tho it had proved itself in peace times, collapsed under It was absolutely imperative that some the strain. new and stabilizing organization be devised to take the place, temporarily, of this broken-down marketing machinery and that some price be established which should outlast the vicissitudes of a single month. The new wheat crop was smaller even than the short crop of the year before, the visible supply was at the vanishing point, the hedging facilities of the exchanges offered no real protection to the legitimate trader, the supply side of the market was helpless and disorganized, while the demand side was leagued into two powerful organizations as represented by the Wheat Export Company and the American millers. The distributing trades were in a deplorable state of speculation occasioned by the extreme price fluctuations of the spring and summer. Those consumers were hoarding flour who could afford to, while those who could not were clamoring for a reduction in living costs. American industry was passing through a series of strikes, wage disputes, and labor adjustments which seriously threatened to impair our whole national efficiency in prosecuting the war.

these conditions a firm insistence that something be done to restore economic order, that some workable arrangement be devised to inspire confidence and quiet apprehension and alarm, was of far greater help to the nation than an attitude of laissez faire could possibly have been.

Another phase of the matter cannot be too greatly emphasized. This is the bad economics and worse psychology of the laissez-faire method of conservation by leaving things alone until mounting prices should enforce conservation upon those elements of the community who can least afford to pay the price and who, presumably, most need the goods. This is conservation with a vengeance; to quote Mr. Hoover's words, "it is conservation for the rich at the expense of the poor." The experience of April and May, 1917, should be a sufficient warning as to what might have been expected to happen had the restraining influence of the Food Administration been withheld. The unified and insistent buying of the Allies and the more or less panicstricken efforts of American distributors and consumers to provide themselves with flour, would probably have been repeated with variation through the entire harvest year. The short crop would probably not have lasted more than a few months in these conditions: long before another harvest could have been gathered wheat and flour prices would probably have touched undreamed-of All the results of unbridled speculation might well have been expected, with what consequences upon the temper of the industrial and consuming community can easily be surmised.

The one large class in the community who might conceivably have gained from such a state of affairs is the farmers. Yet even here it is doubtful whether the farmers' interests have not been better served by the

maintenance of a fixed price for wheat throughout the 1917-18 crop year. It must always be remembered that in enacting the Food Act in 1917, Congress had guaranteed the farmers a minimum price of \$2.00 per bushel for wheat of the 1918 harvest. The Food Administration's "fixed price" for 1917-18 (\$2.20) was determined by the Wheat Price Committee with due consideration of the guaranteed minimum for 1918-19. It could not be less (than \$2.00) if hoarding was to be checked; nor could it well be very much more than the probable minimum for 1918-19. As matters turned out, the guaranteed price to the producers in 1918-19 was practically the same as the Food Administration's fair price in 1917-18. It must be remembered also that in September, 1918, President Wilson announced by proclamation the minimum guaranteed price for the crop of 1919 at practically the same figure as for the 1918 crop and that of 1917. Had the price been left uncontrolled in 1917-18 it might conceivably have gone to so high a point that many farmers would have profited unduly as compared with other classes in the community. From the point of view of social welfare this was a contingency to be avoided as much as profiteering by any one else. And had the price gone to a very high figure it would probably have proved extremely difficult to place the limit of the actual guaranty for the 1918-19 season at a point very much lower than what the farmers would have come to regard as normal. In these conditions there is no assignable limit to the amount of wheat which might have been planted in 1918-19, to the detriment of other crops and the live stock industries, to say nothing of the burden which might have been placed upon the government in making good its promise to guarantee to every producer the minimum price.

There was much clamor in some quarters in 1917 as to the inadequacy of the Food Administration's fair price of \$2.20 per bushel, Chicago basis, and its probable repressive influence upon wheat planting for the succeeding season. The adequacy of this price, "fixed" as a minimum in August, 1917, and maintained as a maximum until the new crop year, beginning July 1, 1918. is perhaps best gauged by the fact that the acreage planted to wheat with the guarantee of \$2.00 and some expectation (realized in September) of a continuance of the \$2.20 price, was, with a single exception, the largest ever known; the seeding of winter wheat established a new acreage record. The Canadian price, which had previously been \$2.40 per bushel, was lowered to \$2.21 for No. 1 Dark Northern upon the announcement of the Food Administration's fair price of \$2.20 in August, 1917; yet in 1918, Canada planted the largest wheat acreage on record in spite of a serious labor shortage. In the matter of a fixed price the Food Administration seems to have seen not less of the truth than its critics but more. The farmers received much more for their wheat over the season in 1917-18 than they had in any previous year, in spite of the "sky-rocketing" prices of May, 1917. The achievement of the Food Administration was to secure to the producer more nearly his "money's worth" than would have been possible under a system of variable prices and time speculation. This, coupled with the reduction of milling profits and the narrowing of trading margins all along the line, brought the producer's price and the consumer's price much closer together than they had been in recent years.

XXIII

2. In its conservation program the Food Administration cannot be said to have been as successful as in the maintenance of the fixed wheat price and the stabilization of flour prices. The terms of the problem as it appeared in August, 1917, were about as follows: (a) The United States had come into the new crop year, 1917-18, with stocks of wheat and flour from the old crop equivalent to about fifty to sixty million bushels — less than a month's requirements for our own population. new crop was very disappointing; it has been variously estimated at from 610,000,000 to 650,000,000 bushels. (c) European harvests were even more disappointing, and the partial failure of the Argentine wheat crop of 1917 and the ensuing embargo upon exports threw an even larger burden upon the United States and Canada than had been expected. (d) Because of the small stocks and short harvest in this country it was imperatively necessary to plant as large an acreage as possible in order to insure sufficient supplies for the new year. This meant the subtraction of a very large amount of wheat for seed — probably not less than 85,000,000 bushels.

The net result of all this was that if our normal rate of consumption should be maintained there would be very little surplus for export. In other words, almost the entire export quota would have to come out of a saving from their normal consumption by the American people. Measures had to be adopted, therefore, which would insure this saving, and yet prevent any part of our people from going hungry. Several courses were open:

- (1) Rationing.
- (2) A laissez-faire policy, leaving the Allied buyers free to enter our markets and bid up prices for our own

people as they did in May, 1917, to the point where the necessary saving in consumption would be secured through the medium of excessively high prices.

- (3) An appeal for voluntary conservation and restriction of consumption by those elements in the community which could best afford to forego the use of wheat bread.
- (4) Commandeering of the necessary supplies by government action.

The first two methods were equally impossible — the first because of the extraordinary complexity and expensiveness of the task, in a country as large as the United States, and because of its repugnance to American methods, and the second for reasons which have just been indicated. 1 At the outset the Food Administration announced its confidence in the efficacy of self-imposed restrictions on consumption by individual action, and for the first few months it relied almost wholly upon voluntary conservation to effect the necessary saving in food consumption. A widespread propaganda was instituted for the conservation of wheat, meat, fats, and sugar, and the billboards were mobilized in the campaign against waste and extravagance. The results, so far as wheat and flour were concerned, were upon the whole, disappointing. In justice it should be said that there was a very considerable saving of wheat flour by many persons in the community, a saving which represented conscientious and idealistic service. appears to have been more than offset, however, by increased consumption on the part of certain sections in the community which were enjoying unwonted prosperity, growing out of the flush of war activity and high wages. Wheat flour was, thanks to the stabilized price. the cheapest food on the market, and there seems to have been a large increase in its use by people who. perhaps, had never had adequate nourishment before.

¹ See page 5, supra.

To expect conservation in these conditions was like trying to lift oneself by one's bootstrap. Towards midwinter it became apparent that the unprecedented rate of milling activity in the flour industry was not enough to enable us to fulfill our self-imposed obligation to our European allies. It was seemingly impossible to fill up the gaps in our own commercial stocks; demand continued unabated. One underlying reason was that there was a considerable amount of hoarding of flour by consumers who had laid in stocks during the preceding spring and summer and who still continued to buy all they could get.

The export situation became very serious; winter weather of unprecedented severity and duration, coupled with railroad and steamship congestion, and breakdown in the coal supply, had by January led to a serious falling behind in our rate of flour shipments abroad. In these circumstances some decisive action was imperative. It came early in the new year, shortly after Lord Rhondda's appeal to America to send more wheat to meet Europe's needs. On January 10, 1918, President Wilson issued a proclamation appealing to all loval citizens to make fresh sacrifices for the Allied cause by reducing still further their consumption of essential foodstuffs vitally needed for shipment abroad. appeal was backed up by wheat conservation rules issued through the Milling Division of the Food Administration, January 15th, and effective February 15th, which required the purchase of "substitutes" (corn meal, barley flour, rye flour, oatmeal) in a one to one ratio with wheat flour by all buyers at retail and the admixture by bakers of wheat flour substitutes at the ratio of one pound in four with wheat flour in making white bread. Only with the application of the "substitute" rules did the conservation program of the Food Administration become really effective. The total food

consumption of wheat flour in the United States during the eight months from July 1, 1917, to February 28, 1918, was considerably in excess of the corresponding figures for any year except 1915-16, and well over the average for the three "pre-war" years 1914-15 to 1916-17.1 Net exports for the same eight months had fallen far behind the figures for any year since 1911-12.2 In these conditions some decisive action to enforce conservation and stimulate exports had become imperative. This was supplied in part by the "substitute" requirements, which resulted in a great diminution of flour purchases, and in part by the requisition of a considerable part of the output of all the larger mills by the Food Administration. The proportion taken was at first (January to April) 30 per cent; later (May to June) it was increased to 45 per cent. This action, together with increased wheat imports, permitted a speeding up of exports of flour; until by the end of the crop year (June 30, 1918) 22,000,000 barrels of flour and 34,000,-000 bushels of wheat had been shipped abroad. The net export movement for the twelve months was equivalent to a total of 132,000,000 bushels of wheat, from a crop which had promised to be scarcely adequate for domestic consumption.

A curious accompaniment of the intensified conservation movement of the spring months of 1918 was the voluntary relinquishment of stocks of hoarded flour by individual consumers, bakers, grocers, in response to appeals by the Food Administration. No estimate can be hazarded as to the amount of these holdings which were thus brought out; in the aggregate it appears to have been considerable. Their surrender was a testi-

¹ Estimates of U. S. Food Administration, Statistical Division, Information Service ³ Bulletin No. 1045.

² Ibid. Net exports of wheat and flour from July, 1917, to February, 1918, were equivalent to 60,548,504 bushels; the average for the five years 1912-13 to 1916-17 (same months) was over 148,000,000 bushels.

monial both to the complexity of the task which the Food Administration had shouldered and to popular confidence in the degree of success with which it has been performed.

XXIV

3. The problem of equitable distribution of wheat to the flour mills by the Grain Corporation in 1917–18, was primarily a commercial problem and one of peculiar difficulty. Not only was there a short crop, but the existing supplies were so faultily located with respect to some of the large milling centers as to necessitate a considerable shifting of grain from one section to another as well as the importation of wheat from outside sources far in excess of anything known in previous years. The Grain Corporation, administered as a public agency by men who had been conspicuously successful in private life as practical grain men, established an enviable record for the uniform sagacity and fairness with which it handled the large problems of allocating the existing stocks of wheat in such a way as to fulfill our obligations to our allies and at the same time to prevent local flour famines in the United States. The achievement speaks for itself; no one went hungery in this country, and through the combined self-denial of millions of individuals here our engagements were made good to our allies in arms. This accomplishment was a splendid achievement of democracy at its best; the fact that many able men, inspired by Herbert Hoover's example, divorced themselves from their private interests and at great personal sacrifice devoted themselves to public work, rendered gratuitously, is indicative of a fine spirit which augurs well for American idealism.

WILFRED ELDRED.